

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A mechanical persistent current switch comprising:
a bulk member of an RE-Ba-Cu-O superconductor, RE representing a rare earth element,

wherein said bulk member is made by a melt process in which resin including fillers having a low thermal expansion coefficient in a dispersed manner are impregnated and

connector material forming a current terminal and a voltage terminal on said bulk member, wherein the contacting surfaces of the connector material are polished, and a direction of current is ~~parallel~~ perpendicular to the ~~an~~ ab surface of the bulk member by making the contact surface of the connector material ~~perpendicular~~ parallel to the ab surface of the connector material.

Claims 2-4. Canceled.

5. (Withdrawn) A method of using a mechanical persistent current switch according to claim 1 having a pre-treatment of passing currents above the critical value until the ohmic resistance behavior appears prior to using the mechanical persistent current switch.